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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,082	10/10/2001	Katsuhiro Ishii	110671	4514
7590 05/10/2006			EXAMINER	
Oliff & Berridge PO Box 19928			KARKHANIS, AASHISH	
Alexandria, VA 22320			ART UNIT	PAPER NUMBER
			3714	
		DATE MAILED: 05/10/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/937,082	ISHII, KATSUHIRO				
Office Action Summary	Examiner	Art Unit				
	Aashish Karkhanis	3714				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 A	<u>pril 2005</u> .					
2a) ☐ This action is FINAL . 2b) ☒ This						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•					
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-27</u> is/are rejected.	•	·				
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	ır.					
10)⊠ The drawing(s) filed on <u>10 October 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).				
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	u (PCT Rule 17.2(a)).	·				
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
•						
Attachment(s)	•					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate Patent Application (PTO-152)				
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	6) Other:	The state of the s				

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1 – 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Hook et al. (U.S. Patent 6,342,892 B1).

Regarding Claims 1, 5-7, 10, 12-17 and 23-26, Van Hook discloses a game system performing image generation including a memory which stores a program and data for image generating (col. 2, lins. 21-28), and at least one processor which is connected to the memory and performs processing for image generating (col. 2, lins. 25-28) including an intermediate buffer drawing section which temporarily draws an image of a geometry processed object in an intermediate buffer in place of drawing the image in a frame buffer (col. 9, lins. 28-33; where image data is stored in a general location in main memory for later use by a graphics processor) and a frame buffer

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drawing section which draws the image of the geometry processed object drawn in the intermediate buffer from the intermediate buffer into the frame buffer (col. 13, lins. 53 – 55; where a texture buffer stores texture image data to be written to a frame buffer), where into the frame buffer the frame buffer drawing section draws a primitive surface of which drawing positions are specified based on three-dimensional information of the object (col. 2, lins. 55 - 56) and on which the image of the geometry-processed object drawn in the intermediate buffer is texture-mapped (col. 45, lins. 18 – 22; where texture information is added to an image within intermediate texture memory), an image effect section which performs a given image effect processing on the image on the intermediate buffer before the image drawn in the intermediate buffer is drawn in the frame buffer (col. 45, lins. 32 – 40; where additional graphical operations are performed on an image in a frame buffer used as an intermediate buffer and written back into a framebuffer for display after all operations have been performed), an image synthesizing section which synthesizes an image drawn in the intermediate buffer at a present frame with another image drawn in the intermediate buffer at a past frame before the image drawn in the intermediate buffer is drawn in the frame buffer, an image synthesizing section which synthesizes an image drawn in the intermediate buffer with another image drawn in the frame buffer before the image drawn in the intermediate buffer is drawn in the frame buffer (col. 9, lins. 44 – 47; where double buffering allows two images to be synthesized in a frame buffer at the same time for output to a video device at different times), and wherein the intermediate buffer drawing section draws the image of the geometry processed object in the intermediate buffer for each twoArt Unit: 3714

frame or each M-frame (M greater than or equal to 3) (col. 9, lins. 44 - 47; where double buffering allows two images to be synthesized in a frame buffer at the same time for output to a video device at different times).

Regarding Claims 3, 19 and 21 - 22, Van Hook discloses a game system wherein when a plurality of primitive surfaces corresponding to a plurality of objects are to be drawn into the game buffer, the frame buffer drawing section performs hidden-surface removal between the primitive surfaces based on the depth values of the respective primitive surfaces (col. 16, lins. 27 - 35) and wherein the frame buffer drawing section draws a plurality of primitive surfaces of which drawing positions are specified based on the three-dimensional information of one object into the frame buffer (col. 5, lns. 65 - 67), and makes images texture-mapped over the plurality of primitive surfaces different from one another (col. 6, lins. 19 - 29).

Regarding Claims 9, 18 and 27, Van Hook discloses a game system wherein when the images of plural geometry-processed objects are drawn in the intermediate buffer, the intermediate buffer drawing section draws an image of a K-th object in the intermediate buffer at a N-th frame and draws an image of a L-th object in the intermediate buffer at a (N+1)-th frame without drawing the image of the K-th object in the intermediate buffer (col. 9, lins. 15 – 20; where image data may be provided directly to a display processor for an unspecified frame which may be an (N+1)-th frame with a K-th object, or image data may be provided to a display processor for intermediate buffering for an unspecified frame which may be an N-th frame with an L-th object).

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Response to Arguments

Applicant's arguments with respect to claims 1 – 27 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

- 2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - U.S. Patent 5,946,004: Video graphics processing with multiple processors.
 - U.S. Patent 6,050,896: Video graphics processing with multiple frame buffers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aashish Karkhanis whose telephone number is 571-272-2774. The examiner can normally be reached on 0800-1630 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Jones can be reached on (571) 272-4438. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free)

JOHNM. HOTALING, II PRIMARY EXAMINER

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